

Notice of Allowability

Application No.

10/790,092

Examiner

Satya B. Sastri

Applicant(s)

KAWAI ET AL.

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to June 19, 2006.
2. ☒ The allowed claim(s) is/are 1,4,7,8,10-12,14 and 15.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S COMMENT/REASONS FOR ALLOWANCE

1. All previous rejections have been overcome by the amendment filed on June 19, 2006 and the rejections are withdrawn. *Claims 1, 4, 7, 8, 10-12, 14 and 15* are now pending in the application.

Reasons For Allowance

2. *Claims 1, 4, 7, 8, 10-12, 14 and 15* are allowed.

3. The following is an Examiner's Statement of Reasons for Allowance:

The instant claims are allowable over prior art to Behan et al. (US 5,500,223), Moy (US 5,804,298), Redding, Jr. (US 6,149,953), and Tanaka et al. (US 6,106,946).

Instant claims are directed a microcapsules comprising a shell and a liquid substance which is encapsulated in the shell, with the microcapsule being characterized in that the shell contains organic polymer fine particles having a diameter no larger than 1 micron, a sheet comprising a binder and microcapsules comprising a shell and a liquid substance which is encapsulated in the shell, with the microcapsule being characterized in that the shell contains fine organic particles having a diameter no larger than 1 micron, and electrophoretic display comprising such sheets or microcapsules or sheets.

Behan et al. disclose an encapsulating method using silica having a particle size not greater than 100 nm. An emulsion is formed by mixing silica with hydrophobic materials such as flavors, fragrances, cosmetic ingredients etc. to be encapsulated and subsequently gelling the emulsion.

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The prior art to Moy concerns microcapsules with reduced shell wall permeability accomplished by way of incorporating inorganic colloidal silica particles into an encapsulation dispersion.

Prior art to Redding Jr. concerns seeded microcapsules comprising a core surrounded by a shell having a seeding agent disposed therein for the purpose of imparting enhanced structural or functional characteristics. The seeding agents may be pH sensitive compounds such as ascorbic acid, citric acid, sodium bicarbonate etc. and the core material may be a liquid material such as mineral oil, vegetable oil, flavors, fragrances etc. The ascorbic acid particles dispersed in the organic shell should be 0.5-200 micrometers in size (column 7, lines 65-67 and column 8, lines 1-4).

Tanaka et al. disclose microcapsules containing a magnetic fluid having particles 5-200 nm, organic solvent and a foaming agent encapsulated in the shell (abstract).

The prior art of record does not teach or suggest, alone or in combination, a shell comprising solid organic or polymeric particles and encapsulating a fluid material as claimed instantly. Therefore, the instantly claimed invention is deemed allowable over closest prior art of record as per said art neither anticipating nor rendering, alone or in combination, the instantly claimed invention.

Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance.

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Future Correspondence


4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satya Sastri whose telephone number is 571-272-1112.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone numbers for the organization where this application or proceeding is assigned is (571) 273 8300 for regular communications. The unofficial direct fax phone number to the Examiner's desk is 571-273-1112.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


SATYA SASTRI

July 10, 2006


DAVID W. WU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700